Amendments to the Specification

Please amend the title as follows:

POWER SWITCH STRUCTURE WITH LOW RDSON AND LOW CURRENT LIMIT ~~AND METHOD~~

Please amend the following paragraphs in the specification:

[0024] According to the present invention, a first gate or control electrode 48 controls current conduction in first switch 41, and a separate or second gate or control electrode 49 controls current conduction in second switch 42. More particularly, first control electrode 48 controls a first pair of current carrying electrodes or regions (e.g., sources 52 and drain 53), and second control electrode 49 controls a second pair of current carrying electrodes or regions (e.g., sources 56 and drain 54).

[0025] First switch 41 and [[a]] second switch 42 each have a common drain 53 and 54 respectively coupled to a load 44 and a filter capacitor 46. Filter capacitor 46 functions to smooth out noise spikes on power bus 51 to provide a more stable biasing. Load 44 comprises, for example, a DC/DC converter that draws a load current I_{LOAD} of about 5 amperes as a peak value through capacitor 46 and load 44. A typical average value of I_{LOAD} is about 3 amperes. By way of example, capacitor 46 has a value of about 1,000 microfarads.

[0026] Hot swap structure 31 further includes a current limit device or circuit 38 coupled to control circuitry 37, control

electrode 48 of switching device [[42,]] 41, and control electrode 49 of switching device [[41]] 42. A comparator device 36 including a voltage comparator 39 and an inverter 41 is coupled to control electrodes 48 and 49. Comparator device 36 functions to turn-on control electrode 49 once the V_{gs} at control electrode 48 reaches a certain or pre-determined value (e.g., 5 volts), which corresponds to a non-current limit mode. Control circuitry 37 is coupled to split gate device 33 to turn on or turn off split gate device 33 in response to sensed signals, and comprises, for example, a comparator and voltage reference circuit.

[0036] FIG. 7 shows an enlarged cross-section view of hot swap device 31 including split gate structure 81 taken along reference line [[6-6]] 7-7 in FIG. [[1]] 6. Hot swap device 31 preferably is formed on one body of semiconductor material 84 and includes split gate device 33, comparator device 36, and current limit device 38. Split gate device 33 includes a first pair of current carrying electrodes or regions 52 and 53, and a second pair of current carrying electrodes or regions 54 and 56. First gate or control electrode 87 is formed on body of semiconductor material 84, and controls first pair of current carrying electrodes 52 and 53. Second gate or control electrode 92 is formed on body of semiconductor material 84, and controls second pair of current carrying electrodes 54 and 56. In the embodiment shown, current carrying electrodes 52 and 56 form source regions of device 33, and current electrodes 53 and 54 form drain regions. Preferably, current carrying electrodes 53 and 54 are formed in the same portion of body of semiconductor material 84 to provide a common drain region 96. Preferably, currently carrying electrodes 52, 53, 54, and 56 are formed in the same body of semiconductor

material to provide an integrated device.

[0038] The current through the sense cells (i.e., switch 43) is routed through Rsense to develop a voltage Vsense. As Vsense increases, the voltage at the gate of switching device 41 increases, and eventually switching device 41 turns on through switch 111. Resistors 112 and 113 function as a level shift to set the gate voltage of switch 11. Device 41 pulls current through resistor R_{G1}, which decreases the gate voltage thereby limiting current flow in first switch 41.